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## REMARKS

2 The Applicants respectfully request reconsideration and allowance of claims 1-5 and 7-  
3 16, together with the previously allowed claims, claims 18-24.

4 The Applicants appreciate the allowance of claims 18-24 in the current Office Action and  
5 the indication that claims 7, 12, and 17 were directed to allowable subject matter.

6

## 7 THE TELEPHONE INTERVIEW

8 The Applicants appreciate the telephone interview conducted between Examiner Wilson  
9 and Applicants' attorney Russell D. Culbertson on August 26, 2005. In the telephone interview,  
10 the Applicants' attorney indicated the above amendments would be made in the case. No  
11 agreement was reached as to the allowability of claims 1 and 13 as amended above.

12

## 13 THE AMENDMENTS

14 Claim 1 is amended above to incorporate the test circuitry used to test the  
15 communications bus as described in claim 18, which has been allowed. Claim 3 is amended to  
16 correct the dependency. Claim 12 is amended to refer to "tri-state driver" in element (d) and to  
17 use the singular connector "is" in element (a). Claim 13 is amended above to incorporate the  
18 limitations previously set out in claim 17. The current Office Action indicated that the  
19 limitations previously set out in claim 17, and now incorporated into independent claim 13 by the  
20 above amendment, defined allowable subject matter. Claim 13 is also amended above in element  
21 (a) and in the preamble to clarify that each respective source node and destination node pair  
22 includes a respective set of alternate transmission paths extending there between. Claim 18 is  
23 amended above to refer to the "source node" in the third line of the preamble. Claims 6 and 17

1 are canceled above to accommodate the amendments to their respective dependent claims, claims  
2 1 and 13.

3 Claims 1-5 and 7-24 are pending in the case in view of the above amendments.

4

5 **CLAIMS 1-5 AND 7-16 ARE ALLOWABLE OVER THE CITED REFERENCES**

6 The current Office Action rejected claims 1-5, 8-11, and 13-16 under 35 U.S.C. § 103(a)  
7 as being unpatentable over U.S. patent No. 4,985,830 to Atac et al. (the "Atac patent" or "Atac")  
8 in view of U.S. patent No. 4,982,114 to Nakamura et al. (the "Nakamura patent" or  
9 "Nakamura"). Claims were rejected under 35 U.S.C. §103(a) as being unpatentable over Atac in  
10 view of Nakamura and U.S. patent No. 6,185,706 to Sugasawara (the "Sugasawara patent" or  
11 "Sugasawara"). The Applicants respectfully submit that the claims are not obvious over the cited  
12 references on the ground that the proposed combinations do not teach or suggest each element  
13 required in the respective claims.

14

15 **Claims 1-5 and 7-12**

16 Claim 1 is directed to a communications bus connected between a source node and a  
17 destination node. As amended above, claim 1 requires:

18 (a) a number of alternate transmission paths extending between the source node and  
19 the destination node on a common substrate comprising a semiconductor chip;  
20 (b) a source switching arrangement interposed between the source node and the  
21 alternate transmission paths, the source switching arrangement being operable to  
22 selectively connect the source node to a selected one of the alternate transmission  
23 paths and disconnect the source node from each other alternate transmission path;  
24 (c) a destination switching arrangement interposed between the destination node and  
25 the alternate transmission paths, the destination switching arrangement being  
26 operable to selectively connect the destination node to the selected one of the  
27 alternate transmission paths and disconnect the destination node from each other  
28 alternate transmission path; and

(d) test circuitry connected to the source node and destination node for applying a test signal to the selected one of the alternate transmission paths and for monitoring the destination node to determine whether the test signal is properly received at the destination node, wherein when the test signal is not properly received at the destination node the source switching arrangement disconnects the source node from the selected one of the alternate transmission paths and connects the source node to a respective one of the other alternate transmission paths, and the destination switching arrangement disconnects the destination node from the selected one of the alternate transmission paths and connects the destination node to the respective one of the other alternate transmission paths. (Emphasis added)

As indicated in the Office Action at the top of page 6, the prior art of record in the case does not anticipate or render obvious applying a test signal to a first alternate transmission path between a source and destination node, determining if the signal is properly received at the destination node, and if the test signal is not properly received at the destination node, switching to a second one of the alternate transmission paths between the source and destination nodes. Because the prior art of record does not teach or suggest the test circuitry now required at element (d) of claim 1, the Applicant believes claim 1 is in condition for allowance together with its dependent claims, claims 2-5 and 7-12.

### Claims 13-16

Claim 13 is directed to a communications bus connected between a number of source nodes and an equal number of destination nodes. Among other elements, claim 13 requires the receive node, first direction control node, send node, second direction control node, send switching arrangement, receive switching arrangement, and first and second direction switching control arrangements previously set out at claim 17. As indicated in the Office Action at paragraph 4.0, the prior art of record in the case does not teach or suggest the arrangement of elements previously required in claim 17. Since these limitations are now set out in independent

1 claim 13, the Applicant believes that claim 13 is in condition for allowance together with its  
2 remaining dependent claims, claims 14-16.

3

4 CONCLUSION

5 For all of the above reasons the Applicants respectfully request reconsideration of claims  
6 1-5 and 7-16, and allowance of these claims together with the previously allowed claims 18-24.

7 If any issue remains as to the allowability of these claims, or if a conference might  
8 expedite allowance of the claims, the Examiner is asked to telephone the undersigned attorney  
9 prior to issuing a further action in this case.

10

11 Respectfully submitted,

12 THE CULBERTSON GROUP, P.C.

13

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24 CERTIFICATE OF FACSIMILE

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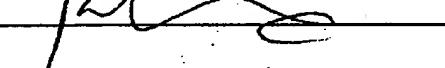
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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, (Fax No. 571-273-8300) on September 1, 2005.

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Page 24 of 24